ABSTRACT OF THE DISCLOSURE

An integrated circuit may have separate clock control for a number of different functional units. Ancillary to some of the functional units may be an activity detector and clock control unit which monitors input to its functional unit to determine when the functional unit will be inactive. When an activity detector and clock control unit determines that a particular functional unit is or will be inactive, it may disable clocking to its functional unit while the functional unit is inactive. When activity detector and clock control unit determines that activity will resume for its functional unit, it enables clocking to its functional unit. Thus, the activity detector and clock control unit for each such functional unit functions to control clocking to its respective functional unit so that during periods of inactivity, inactive functional units are not clocked to reduce the overall static and/or dynamic power consumption for the integrated device.